

WHAT IS CLAIMED IS:

1. A concentrated phosphorus fertilizer comprising a buffered composition comprising an organic acid and salts thereof and a phosphorous-containing acid and salts thereof, such that when said composition is diluted
5 with water, there is formed a substantially fully solubilized use-dilution fertilizer having a foliage-acceptable pH for phosphorus uptake.
2. The phosphorus fertilizer of claim 1 wherein said phosphorous-containing acid is selected from the group consisting of phosphorous acid, hypophosphorous acid, polyphosphorous acid, and polyhypophosphorous
10 acid.
3. The phosphorus fertilizer of claim 1 wherein said organic acid is selected from the group consisting of dicarboxylic acids and tricarboxylic acids.
4. The phosphorus fertilizer of claim 3 wherein said organic acid is
15 citrate.
5. The phosphorus fertilizer of claim 1 wherein said use-dilution fertilizer has a pH of about 5.0 to about 7.0.
6. The phosphorus fertilizer of claim 1 wherein said use-dilution fertilizer has a pH of about 5.5 to about 6.5.
- 20 7. The phosphorus fertilizer of claim 1 wherein said water has a pH of about 6.5 to about 8.5.
8. The phosphorus fertilizer of claim 1 that is essentially clear and devoid of precipitate.
9. The phosphorus fertilizer of claim 1 wherein said use-dilution fertilizer
25 comprises a ratio of said concentrated phosphorus fertilizer to said water of

about 1: 40 to about 1:600.

10. The phosphorus fertilizer of claim 1 wherein said phosphorus-containing acid is present in an amount of about 30 to about 40 weight percent.

5 11. A concentrated phosphorus fertilizer comprising a buffered composition comprising an organic acid and salts thereof, a phosphorous-containing acid and salts thereof, and copper, such that when said composition is diluted with water, there is formed a use-dilution fertilizer having a foliage-acceptable pH for phosphorus uptake.

10 12. A concentrated phosphorus fertilizer for irrigation application, said fertilizer comprising a buffered composition comprising an organic acid and salts thereof and a phosphorous-containing acid and salts thereof, said composition having a pH less than about 2.5.

13. The phosphorus fertilizer of claim 12 having a pH of less than about
15 1.5.

14. A method of providing phosphorus to a plant comprising diluting a concentrated phosphorus fertilizer comprising a buffered composition comprising an organic acid and salts thereof and a phosphorous-containing acid and salts thereof with water to form a substantially fully solubilized use-
20 dilution fertilizer having a foliage-acceptable pH for phosphorus uptake, and applying said use-dilution fertilizer to the foliage of said plant.

15. The method of claim 14 wherein said phosphorous-containing acid is selected from the group consisting of phosphorous acid, hypophosphorous acid, polyphosphorous acid, and polyhypophosphorous acid.

25 16. The method of claim 14 wherein said organic acid is selected from the group consisting of dicarboxylic acids and tricarboxylic acids.

17. The method of claim 16 wherein said organic acid is citrate.
18. The method of claim 14 wherein said water has a pH of about 6.5 to about 8.5.
19. The method of claim 14 wherein said use-dilution fertilizer comprises
5 a ratio of said concentrated phosphorus fertilizer to said water of about 1:40 to about 1:600.
20. The method of claim 14 wherein said use-dilution fertilizer has a pH of about 5.0 to about 7.0.
21. The method of claim 14 wherein said use-dilution fertilizer has a pH
10 of about 5.5 to about 6.5.
22. The method of claim 14 wherein said plant is a citrus or avocado plant.
23. A method of providing phosphorus to a plant comprising distributing a liquid concentrated phosphorus fertilizer comprising a buffered composition
15 comprising an organic acid and salts thereof and a phosphorous-containing acid and salts thereof through an irrigation system and delivering said fertilizer to soil near said plant, said fertilizer having a pH less than about 2.5.
24. The method of claim 23 wherein said fertilizer has a pH of less than
20 about 1.5.